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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/706,050	11/13/2003	Ta-Yuan Lee	LEE0025-US	7138

7590 06/26/2006

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EXAMINER

NGUYEN, HOAN C

ART UNIT	PAPER NUMBER
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2871

DATE MAILED: 06/26/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/706,050	Applicant(s) LEE ET AL.	
	Examiner HOAN C. NGUYEN	Art Unit 2871	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 May 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) 4,5,14,15 and 20 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3,6-13 and 16-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 5/26/2006 has been entered.

Claim 10 is cancelled.

Claims 4-5, 14-15 and 20 are withdrawn from consideration.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

1. Claims 1-3, 12-13 and 21 are rejected under 35 U.S.C. 102(b) as being anticipated by Yano et al. (JP2002006815).

Yano et al. teach a display apparatus comprising:

Claims 1, 11 and 21:

- a liquid crystal panel having a first area and a second area B1 and B2; in response to an image signal, said first and second capable of displaying variable data;
- a first light source L1 for illuminating said first area, said first light source independently and selectively entering into a first state and a second state different from said first state;
- a second light source L2 for illuminating said second area, said second light source independently and selectively entering into a third state and a fourth state different from said third state;
- a processor 16/17/18 for determining states of said first light source and said second light source.

wherein

- said first light source and said second light source are independently controlled so that said first area (ON state) is brighter than said second area when said first light source is in said first state and said second source is in said fourth state (OFF state). The back light with light sources of fluorescent tubes that divide into fields of ON and OFF sequence; therefore,

Claims 2 and 12:

- said first state is an ON state, and said second state is an OFF state.

Claims 3 and 13:

- said third state is an ON state, and said fourth state is an OFF state.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-3, 6-9, 11-13, 16-19 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Whittaker et al. (US5657004) in view of Shigeta (US6657640B2).

Whittaker et al. teach a display apparatus comprising:

Claims 1, 11 and 21:

- a panel 140 having a first area and a second area (transparent portions 1 and 2);
in response to an image signal, said first and second capable of displaying variable data;
- a first light source for illuminating said first area, said first light source independently and selectively entering into a first state and a second state different from said first state;
- a second light source for illuminating said second area, said second light source independently and selectively entering into a third state and a fourth state different from said third state;

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- a processor (a controller 46 including integrated circuit 44) for determining states of said first light source and said second light source.

wherein

- said first light source and said second light source are independently controlled so that said first area (ON state) is brighter than said second area when said first light source is in said first state and said second source is in said fourth state (OFF state). The first light source is ON responding to first audio segment while the second light source is OFF, then the first light source is OFF when the second audio segment starts with the second light source turning ON; the sequence is repeated.

Claims 2 and 12:

- said first state is an ON state, and said second state is an OFF state.

Claims 3 and 13:

- said third state is an ON state, and said fourth state is an OFF state.

Claims 6-7 and 16-17:

- a first light guide plate (transparency 24 considers as light guide) for reflecting and scattering light (reflecting surface on cavities 143/144/146/147 of light source) provided by said first light source so that light uniformly illuminates said first area, wherein said first light guide plate further comprises a light guide structure for reflecting light provided by said first light source to said first area.

Claims 8-9 and 18-19:

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- a second light guide plate (transparency 24 considers as light guide) for reflecting and scattering light provided by said second light source (reflecting surface on cavities 143/144/146/147 of light source) so that light uniformly illuminates said second area, wherein said second light guide plate further comprises a groove surface for reflecting light provided by said second light source to said second area.

However, Whittaker et al. fail to disclose display panel to be the liquid crystal panel.

Shigeta teaches the display panel to be the liquid crystal panel for processing a digital signal, storing data.

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to further modify a liquid crystal display device as Whittaker et al. disclosed with the display panel to be the liquid crystal panel for processing a digital signal, storing data as taught by Shigeta (col. 2 lines 25-40).

3. Claim 22 is rejected under 35 U.S.C. 103(a) as being unpatentable over Whittaker et al. (US5657004) in view of Shigeta (US6657640B2) as applied to claims 1-3, 6-9, 11-13, 16-19 and 21 and in further view of Funamoto et al. (US5619351A).

Whittaker et al. fail to disclose the liquid crystal panel using in mobile phone or digital camera.

Funamoto et al. teach the liquid crystal panel using in digital camera technology for reducing weight and dimension (col. 1 lines 25-34).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to further modify a liquid crystal display device as Whittaker et al. disclosed with using liquid crystal display device in camera technology for reducing weight and dimension, as taught by Funamoto et al. (col. 1 lines 25-34).

Response to Arguments

Applicant's arguments filed on 5/26/2006 have been fully considered but they are not persuasive.

Applicant's ONLY arguments are follows:

- A. Yano et al. fail to teach that the light sources are independently controlled so that lights illuminating on different areas will be visually different.
- B. Whittaker fails to teach a liquid crystal panel including independently controlling states of the first and second light sources to adjust the brightness of different areas, the advantage of conserving power can be achieved, and the first area and the second area are capable of displaying variable data, such as displaying different data or cooperating to display complicated information in response to an image signal.

Examiner's responses to Applicants' ONLY arguments are follows:

- A. Yano et al. teach that the light source must be independently controlled a plurality of fluorescent tubes L1-Ln, so that lights illuminating on different areas will be visually different to sequentially eliminate animation blur caused by a moving image (a moving image may applied to the camera).

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B. Whittaker teaches a display panel (a) including independently controlling states of the first and second light sources to adjust the brightness of different areas and (b) different areas capable of displaying variable data (corresponding to the audio segments) in response to an image signal with discrete visual image shown on each of the four transparency portions 26, 28, 30, 32. The achievement of the advantage of conserving power is inherent for using the liquid crystal panel for display (comparing to another type of a conventional cathode ray tube (CRT) display device).

However, claims do not recite the feature: "the advantage of conserving power can be achieved". Therefore, the argument on this feature is irrelevant.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to HOAN C. NGUYEN whose telephone number is (571) 272-2296. The examiner can normally be reached on MONDAY-THURSDAY:8:00AM-4:30PM.

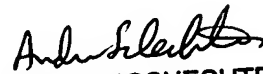
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Nelms can be reached on (571) 272-1787. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

HOAN C. NGUYEN
Examiner
Art Unit 2871

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ANDREW SCHECHTER
PRIMARY EXAMINEE